



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/874,364	10/09/2001	Edward M. Scheidt	STS 119 D1	2947

7590

12/23/2003

IP STRATEGIES, P.C.
SUITE 301
806 7TH STREET, NW
WASHINGTON, DC 20001

EXAMINER

DARROW, JUSTIN T

ART UNIT	PAPER NUMBER
----------	--------------

2132

DATE MAILED: 12/23/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/874,364

Applicant(s)

SCHEIDT ET AL.

Examiner

Justin T. Darrow

Art Unit

2132

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on _____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 3-34,37-65 and 67-69 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 3-34,37-65 and 67-69 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 06 June 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 7.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

1. Claims 1-69 have been presented for examination. Claims 1, 2, 35, 36, and 66 have been canceled and claims 3-6, 9, 18, 25, 32-34, 37-40, 43, 52, 59, and 67-69 have been amended in an amendment filed 06/06/2001. Claims 3-34, 37-65, and 67-69 have been examined.

Priority

2. Acknowledgment is made that the instant application is a continuation of Application No. 09/023,672, filed 02/13/1998.

3. It is noted that this application appears to claim subject matter disclosed in prior Application No. 60/039,696, filed 02/13/1997. A reference to the prior application must be inserted as the first sentence of the specification of this application or in an application data sheet (37 CFR 1.76), if applicant intends to rely on the filing date of the prior application under 35 U.S.C. 119(e) or 120. See 37 CFR 1.78(a). For benefit claims under 35 U.S.C. 120, the reference must include the relationship (i.e., continuation, divisional, or continuation-in-part) of all nonprovisional applications. Also, the current status of all nonprovisional parent applications referenced should be included.

If the application is a utility or plant application filed under 35 U.S.C. 111(a) on or after November 29, 2000, the specific reference to the prior application must be submitted during the pendency of the application and within the later of four months from the actual filing date of the application or sixteen months from the filing date of the prior application. If the application is a utility or plant application which entered the national stage from an international application filed on or after November 29, 2000, after compliance with 35 U.S.C. 371, the specific reference

Art Unit: 2132

must be submitted during the pendency of the application and within the later of four months from the date on which the national stage commenced under 35 U.S.C. 371(b) or (f) or sixteen months from the filing date of the prior application. See 37 CFR 1.78(a)(2)(ii) and (a)(5)(ii). This time period is not extendable and a failure to submit the reference required by 35 U.S.C. 119(e) and/or 120, where applicable, within this time period is considered a waiver of any benefit of such prior application(s) under 35 U.S.C. 119(e), 120, 121 and 365(c). A priority claim filed after the required time period may be accepted if it is accompanied by a grantable petition to accept an unintentionally delayed claim for priority under 35 U.S.C. 119(e), 120, 121 and 365(c). The petition must be accompanied by (1) the reference required by 35 U.S.C. 120 or 119(e) and 37 CFR 1.78(a)(2) or (a)(5) to the prior application (unless previously submitted), (2) a surcharge under 37 CFR 1.17(t), and (3) a statement that the entire delay between the date the claim was due under 37 CFR 1.78(a)(2) or (a)(5) and the date the claim was filed was unintentional. The Director may require additional information where there is a question whether the delay was unintentional. The petition should be addressed to: Mail Stop Petition, Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

Response to Amendment

4. The amendment to the first of two sets of claims 39 and 40 filed on 06/06/2001 does not comply with the requirements of 37 CFR 1.121(c) because the amended claims do not indicate with markings that they depend on claim 37 rather than claim 36 as originally filed. Amendments to the claims filed on or after July 30, 2003 must comply with 37 CFR 1.121(c) which states:

Art Unit: 2132

(c) *Claims.* Amendments to a claim must be made by rewriting the entire claim with all changes (*e.g.*, additions and deletions) as indicated in this subsection, except when the claim is being canceled. Each amendment document that includes a change to an existing claim, cancellation of an existing claim or addition of a new claim, must include a complete listing of all claims ever presented, including the text of all pending and withdrawn claims, in the application. The claim listing, including the text of the claims, in the amendment document will serve to replace all prior versions of the claims, in the application. In the claim listing, the status of every claim must be indicated after its claim number by using one of the following identifiers in a parenthetical expression: (Original), (Currently amended), (Canceled), (Withdrawn), (Previously presented), (New), and (Not entered).

(2) *When claim text with markings is required.* All claims being currently amended in an amendment paper shall be presented in the claim listing, indicate a status of "amended," and be submitted with markings to indicate the changes that have been made relative to the immediate prior version of the claims. The text of any added subject matter must be shown by underlining the added text. The text of any deleted matter must be shown by strike-through except that double brackets placed before and after the deleted characters may be used to show deletion of five or fewer consecutive characters. The text of any deleted subject matter must be shown by being placed within double brackets if strike-through cannot be easily perceived. Only claims having the status of "currently amended," or "withdrawn" if also being amended, shall include markings. If a withdrawn claim is currently amended, its status in the claim listing may be identified as "withdrawn—currently amended."

The amendment to the second of two sets of claims 39 and 40 filed on 06/06/2001 does comply with the requirements of 37 CFR 1.121(c).

Claim Objections

5. Claim 24 is objected to because of the following informality: delete "22" in line 1 and replace with --23--. Appropriate correction is required.
6. Claim 58 is objected to because of the following informality: delete "56" in line 1 and replace with --57--. Appropriate correction is required.
7. Claim 64 is objected to because of the following informality: delete "63" in line 1 and replace with --64--. Appropriate correction is required.

Double Patenting

8. The first set of claims 39 and 40 are objected to under 37 CFR 1.75 as being a substantial duplicate of the second set of claims 39 and 40. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

9. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

10. Claims 3-8, 37-42, and 67-69 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 3-8, 37-42, and 67-69, respectively, of copending Application No. 09/023,672. Although the conflicting claims are not identical, they are not patentably distinct from each other.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Art Unit: 2132

11. Claims 9-17 and 43-51 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-8 and 35-41, respectively, of U.S. Patent No. 6,542,608 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other.

12. Claims 18-24 and 52-58 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 8-14 and 25-31, respectively, of U.S. Patent No. 6,608,901 B2. Although the conflicting claims are not identical, they are not patentably distinct from each other.

13. Claims 25-31 and 59-65 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 2-8 and 35-41, respectively, of U.S. Patent No. 6,549,623 B1. Although the conflicting claims are not identical, they are not patentably distinct from each other.

Allowable Subject Matter

1. Claims 3-8, 32-34, 37-42, and 67-69 would be allowable by terminal disclaimer to overcome the nonstatutory double patenting rejection with respect to any patent issuing from Application No. 09/023,672, set forth in this Office action.

14. Claims 9-17 and 43-51 would be allowable by terminal disclaimer to overcome the nonstatutory double patenting rejection with respect to U.S. Patent No. 6,542,608 B2, set forth in this Office action.

Art Unit: 2132

15. Claims 18-24 and 52-58 would be allowable by terminal disclaimer to overcome the nonstatutory double patenting rejection with respect to U.S. Patent No. 6,608,901 B2, set forth in this Office action.

16. Claims 25-41 and 59-65 would be allowable by terminal disclaimer to overcome the nonstatutory double patenting rejection with respect to U.S. Patent No. 6,549,623 B1, set forth in this Office action.

17. The following is a statement of reasons for the indication of allowable subject matter:

Claims 3-34 and 37-65 are drawn to a cryptographic key split combiner and a process for forming cryptographic keys, respectively. The closest prior art, Hirsch, U.S. Patent No. 5,276,738 A in view of Albert et al., U.S. Patent No. 5,627,894 A, discloses a similar key split combiner and process. Hirsch illustrates a cryptographic key split combiner and a process for combining comprising: a plurality of key split generators for generating cryptographic key splits (see column 1, lines 57-67); a key split randomizer for randomizing the cryptographic key splits to produce a cryptographic key (see column 1, lines 54-57 and lines 62-68; column 2, lines 1-7; column 3, lines 60-65; and figure 1A, items 10, 12, and 16); in which each of the key split generators includes means for generating key splits from seed data (see column 1, lines 49-54 and lines 62-64); in which the plurality of key split generators includes a random split generator for generating a random key split based on reference data (see column 2, lines 55-58); and generating a pseudorandom sequence based on reference data (see column 2, lines 23-29). Albert et. Al. specify generating a random sequence(see column 1, lines 51-67 and column 2, lines 1-2). However, they neither teach nor suggest generating a random sequence based on the

Art Unit: 2132

reference data. This particular limitation incorporated into independent claims 3 and 37 renders claims 3-34 and 37-65 to have allowable subject matter.

Claims 67-69 are drawn to a cryptographic key. The closest prior art, Hirsch, U.S. Patent No. 5,276,738 A discloses a similar key. Hirsch illustrates a cryptographic key formed by the process comprising: a plurality of key split generators for generating cryptographic key splits (see column 1, lines 57-67); and a key split randomizer for randomizing the cryptographic key splits to produce a cryptographic key (see column 1, lines 54-57 and lines 62-68; column 2, lines 1-7; column 3, lines 60-65; and figure 1A, items 10, 12, and 16). However, he neither shows nor implies including a stream of symbols. This particular feature recited in independent claim 67 renders claims 67-69 to have allowable subject matter

Telephone Inquiry Contacts

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin T. Darrow whose telephone number is (703) 305-3872 and whose electronic mail address is justin.darrow@uspto.gov. The examiner can normally be reached Monday-Friday from 8:30 AM to 5:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gilberto Barrón, Jr., can be reached at (703) 305-1830.

The fax number for Formal or Official faxes to Technology Center 2100 is (703) 872-9306. In order for a formal paper transmitted by fax to be entered into the application file, the paper and/or fax cover sheet must be signed by a representative for the applicant. Faxed formal papers for application file entry, such as amendments adding claims, extensions of time, and

Art Unit: 2132

statutory disclaimers for which fees must be charged before entry, must be transmitted with an authorization to charge a deposit account to cover such fees. It is also recommended that the cover sheet for the fax of a formal paper have printed "**OFFICIAL FAX**". Formal papers transmitted by fax usually require three business days for entry into the application file and consideration by the examiner. Formal or Official faxes including amendments after final rejection (37 CFR 1.116) should be submitted to (703) 872-9306 for expedited entry into the application file. It is further recommended that the cover sheet for the fax containing an amendment after final rejection have printed not only "**OFFICIAL FAX**" but also "**AMENDMENT AFTER FINAL**".

Any inquiry of a general nature or relating to the status of this application should be directed to the Group receptionist whose telephone number is (703) 305-3900.

December 15, 2003



**JUSTIN T. DARROW
PRIMARY EXAMINER
TECHNOLOGY CENTER 2100**